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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/733,839 | 12/11/2003 | Sang Hoo Dhong | AUS920030722US1 | 2202 |
| 45327 | 7590 | 06/19/2007 | | |
| IBM CORPORATION (CS) C/O CARR LLP 670 FOUNDERS SQUARE 900 JACKSON STREET DALLAS, TX 75202 | | | EXAMINER MAI, TAN V | |
| | | | ART UNIT 2193 | PAPER NUMBER |
| | | | MAIL DATE 06/19/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/733,839

Applicant(s)

DHONG ET AL.

Examiner

Tan V. Mai

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2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10, 13, 14, 16-19, 21-23, 25, 28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 13-14, 16-19, 21-23, 25, and 28-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-8, 10, 13-14, 16-19, 21-23, 25, and 28-29 are rejected under 35 U.S.C.

101 because the claimed invention is directed to non-statutory subject matter.

Rejection grounds continue to be those set forth in the previous office action (Paper dated 1/3/07, paragraph 2).

3. Applicants' arguments filed on 4/3/07 have been fully considered but they are not persuasive.

Applicants, in their remarks, argue that:

"[a]pplicant respectfully traverses this rejection. Applicant notes that the instant application is entitled "HIGH SPEED ADDER DESIGN FOR A MULTIPLY-ADD BASED FLOATING POINT UNIT," and the Background section of the instant application clearly states:

'The present invention relates generally to a high-speed floating-point adder (adder) and, more particularly, to the improvement of some of the most time critical elements that exist in the adder, such as the end-around-carry-logic.'

'Floating-Point Units (FPU) are well known, and have been an element of computer architecture for a number of years.'

'...there is a need for a method and/or apparatus to streamline each of the processes that make both evaluations and calculations that address at least some of the problems associated with conventional methods and apparatuses for floating point computations.'

The instant applications includes two independent claims -- claims 1 and 16 -- and all other pending claims depend from claims 1 and 16. Independent claim 1 (amended herein) is directed to "An apparatus for computing a result of a floating-point operation..." and comprises tangible elements that work together to produce the result. Applicant asserts that the apparatus of claim 1 is tangible and has utility in at least the computing arts.

Independent claim 16 (amended herein) is directed to 'A computer program product for computing a result of a floating-point operation... having '...a

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medium with a computer program embodied thereon.' Applicant asserts that the computer program product of claim 16 is tangible and has utility in at least the computing arts.'

With respect to the argument, the examiner carefully reviews Applicant's claimed invention. It is noted that applicant hasn't pointed out how/why the claim produces a **useful, concrete, and tangible result**. If the claim as a whole is reasonably interpreted as just solving a mathematical algorithm rather than reciting a practical application of the algorithm which produces a **useful, concrete and tangible result**, then it would be non-statutory. It would appear to be **concrete** and **tangible** in the context of the claim; however, the **useful** result appears lacking. They are pre-emptive in any application. Moreover, independent claim 16 recites a "computer program product ... having a medium with a computer program embodied thereon"; however, applicants' specification do NOT disclose what kind / type of medium. Since claim recites "medium with ... program **embodied** thereon", it appears that applicants might have meant to include transmission media and signals, since program can be embodied on waves, in which case the claim would be non-statutory. Therefore, the rejection is still proper.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (571) 272-3726. The examiner can normally be reached on Mon-Wed and Fri. from 9:30am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An, can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is:

Official (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.



Tan V. Mai
Primary Examiner